CATALOGUE OF PATTERNS

—OF—

Inglis & Hunter's

IRON WORKS,

TORONTO, ONTARIO.

ESTABLISHED 1860 IN GUELPH.

Moved to Toronto 1881.

SPUR, BEVEL, MITRE AND SCREW GEARING, PULLEYS, HANGERS, FLY WHEELS, STEAM ENGINES, WATER WHEELS, GRIST AND SAW MILL IRONS, ETC.

Guelph Evening Mercury Steam Printing House.
1881

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EXPLANATIONS.

Diameter of Patterns given, and calculated from the Pitch Line.

The Diameter of Wheels when cast will be about one-eighth of an inch less per foot than Pattern. The dimensions of the Eye wanted in each Wheel are required in executing an order.

Bevel Wheels only work together as paired in Braces at Margin.

SPUR WHEELS.

3 Inch Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft.	In.	Remarks.
1					
2					
3					
4					
5					
6					
7					
8					
			$2\frac{3}{4}$ In. Pitch.		
9	85	8	6	$2\frac{1}{4}$	
10	42	8	3	$0\frac{3}{4}$	
11					
12					
13					
14					
15					
16					

SPUR WHEELS.

2½ Inch Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft.	Diameter. In.	Remarks.
17	30	5½	2	4	
18	38	5½	2	6¼	
19	76	9½	5	0¾	
20	28	9½	1	10½	
21					
22					
23					
24					
			2¼ In. Pitch.		
25	34	7¼	2	0¼	
26	28	7⅛	1	8	
27	24	7	1	5	
28					
29					
30					
31					
32					

SPUR WHEELS.

2 3-16ths Inch Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft.	Diameter. In.	Remarks.
33	26	$7\frac{1}{2}$	1	$6\frac{1}{4}$	
34	22	7	1	$3\frac{5}{8}$	
35					
36					
37					
38					
39					
40					
			2 In. Pitch.		
41	43	7	2	$3\frac{1}{2}$	
42	29	6	1	$6\frac{3}{8}$	
43	22	$6\frac{1}{4}$	1	2	
44	35	$6\frac{1}{2}$	1	10	
45	29	6	1	$6\frac{1}{4}$	
46	28	$6\frac{1}{4}$	1	6	
47	25	$6\frac{1}{2}$	1	$3\frac{7}{8}$	
48	24	7	1	$3\frac{1}{2}$	

SPUR WHEELS.

$1\frac{3}{4}$ Inch Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft.	Diameter. In.	Remarks.
49	54	3	2	6	
50	12	3	0	$6\frac{3}{4}$	
51	38	5	1	$9\frac{1}{4}$	
52	32	5	1	6	
53	12	5	0	8	
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					

SPUR WHEELS.

1½ Inch Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft.	Diameter. In.	Remarks.
65	144	3	5	8½	
66	28	4	1	1¼	
67	18	4	0	9	
68	24	4⅝	0	11½	
69	13	2½	0	6	
70	14	3	0	6½	
71	9	2¾	0	4⅜	
72	17	4	0	8¼	
73	50	4	2	0	
74	46	4	1	9¾	
75	65	4	2	7¼	
76					
77					
78					
79					
80					

SPUR WHEELS.

1 7-16ths Inch Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft.	Diameter. In.	Remarks.
81	22	$4\frac{1}{4}$	0	$10\frac{1}{2}$	
82					
83					
84					
85					
86					
87					
88					
			$1\frac{1}{4}$ In. Pitch.		
89	76	$2\frac{5}{8}$	2	$6\frac{1}{8}$	
90	32	$2\frac{5}{8}$	1	$0\frac{7}{8}$	
91	13	$2\frac{1}{2}$	0	$5\frac{1}{4}$	
92	12	$2\frac{3}{4}$	0	$4\frac{7}{8}$	
93	65	$2\frac{3}{4}$	2	$2\frac{1}{4}$	
94	30	3	1	0	
95	12	3	0	5	
96	40	3	1	4	

SPUR WHEELS.

$1\frac{1}{4}$ Inch Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft.	Diameter. In.	Remarks.
97	23	3	0	9	
98					
99					
100					
101					
102					
103					
104					
			$1\frac{1}{8}$ In. Pitch.		
105	16	$2\frac{1}{4}$	0	$5\frac{7}{8}$	
106					
107					
108					
109					
110					
111					
112					

SPUR WHEELS.

1 Inch Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft	Diameter. In.	Remarks.
113	104	2	2	$9\frac{5}{8}$	
114	75	2	2	$0\frac{1}{8}$	
115	52	2	1	$4\frac{1}{2}$	
116	34	2	0	$10\frac{7}{8}$	
117	28	$2\frac{1}{2}$	0	9	
118	21	$2\frac{1}{4}$	0	$6\frac{3}{4}$	
119	20	2	0	$6\frac{1}{2}$	
120	14	$2\frac{1}{2}$	0	$4\frac{1}{4}$	
121	14	2	0	$4\frac{1}{4}$	
122	15	$2\frac{1}{4}$	0	$4\frac{3}{4}$	
123	11	$2\frac{1}{2}$	0	$3\frac{1}{2}$	
124	12	2	0	$3\frac{3}{4}$	
125	10	$1\frac{3}{8}$	0	$3\frac{1}{8}$	
126					
127					
128					

SPUR WHEELS.

1 Inch Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft.	In.	Remarks.
129					
130					
131					
132					
133					
134					
135					
136					
			$\frac{7}{8}$ In. Pitch.		
137	72	$2\frac{1}{4}$	1	$7\frac{7}{8}$	
138	17	$2\frac{3}{8}$	0	$4\frac{5}{8}$	
139	14	$2\frac{1}{4}$	0	$3\frac{7}{8}$	
140	13	$2\frac{1}{4}$	0	$3\frac{5}{8}$	
141					
142					
143					
144					

SPUR WHEELS.

¾ Inch Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft.	Diameter. In.	Remarks.
145	75	1¼	1	6¼	
146	37	1¼	0	9	
147	40	1⅜	0	9⅝	
148	16	1¼	0	3⅞	
149	126	1⅝	2	6	
150					
151					
152					
			⅝ In Pitch.		
153	61	2¼	0	11⅝	
154	19	2¼	0	3 9-16th	
155	45	2	0	8½	
156	16	1⅜	0	3	
157	72	1½	1	2¼	
158	54	1⅜	0	10⅞	
159	15	1½	0	3¼	
160					

SPUR WHEELS.

½ Inch Pitch.

No.	No of Cogs.	Face.	Diameter. Ft.	Diameter. In.	Remarks.
161	17	1	0	2⅝	
162	18	1¼	0	3	
163					
164					
165					
166					
167					
168					

7-16th In. Pitch.

169	21	¾	0	2¾	
170					
171					
172					
173					
174					
175					
176					

SPUR WHEELS.

Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft.	In.	Remarks.
177					
178					
179					
180					
181					
182					
183					
184					
			Pitch.		
185					
186					
187					
188					
189					
190					
191					
192					

BEVEL WHEELS.

3 Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft. In.	Remarks.
193						
194						
195						
196						
197						
198						
199						
200						

$2\frac{3}{4}$ In. Pitch.

201						
202						
203						
204						
205						
206						
207						
208						

BEVEL WHEELS.

2½ Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	In.	Remarks.
209	91	7	6	8	6	0	
210	46	7	2⅞	8½	3	0½	
211							
212							
213							
214							
215							
216							

2¼ In. Pitch.

217							
218							
219							
220							
221							
222							
223							
224							

BEVEL WHEELS.

2 Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
225	58	5	$5\frac{1}{4}$	6	3	1	
226	25	5	$1\frac{3}{4}$	6	1	4	
227	57	5	4	6	3	1	
228	35	5	2	6	1	$9\frac{1}{2}$	
229	48	4	$4\frac{1}{4}$	$4\frac{3}{4}$	2	$6\frac{1}{2}$	
230	25	4	$1\frac{1}{2}$	$4\frac{1}{2}$	1	4	
231	75	6	5	$6\frac{1}{4}$	4	0	
232	38	6	$1\frac{1}{2}$	$6\frac{1}{4}$	2	0 5-16	
233	54	5	3	$5\frac{5}{8}$	2	10	
234	44	5	$2\frac{1}{8}$	$5\frac{1}{2}$	2	$4\frac{1}{8}$	
235	80	5	6	$6\frac{3}{4}$	4	2	
236	27	5	$1\frac{3}{4}$	6	1	5	
237							
238							
239							
240							

BEVEL WHEELS.

$1\frac{3}{4}$ Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
241	67	$3\frac{1}{2}$	4	$4\frac{1}{2}$	3	$1\frac{3}{8}$	
242	35	$3\frac{1}{2}$	$1\frac{5}{8}$	$4\frac{3}{8}$	1	$7\frac{1}{2}$	
243							
244							
245							
246							
247							
248							

$1\frac{1}{2}$ In. Pitch.

249	130	$3\frac{1}{2}$			5	2	
250	13	$3\frac{1}{2}$	$\frac{1}{4}$		0	$6\frac{1}{4}$	
251	60	$3\frac{1}{4}$	$2\frac{5}{8}$	$3\frac{1}{4}$	2	$4\frac{5}{8}$	
252	18	$3\frac{1}{4}$	$3\frac{1}{4}$	$3\frac{3}{4}$	0	$8\frac{1}{2}$	
253	47	3	$2\frac{3}{4}$	$3\frac{1}{4}$	1	7	
254	41	3	$2\frac{1}{4}$	$3\frac{1}{4}$	1	$4\frac{1}{2}$	
255							
256							

BEVEL WHEELS.

1¼ Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
257	60	2½	2¾	3½	2	0	
258	45	2½	1⅝	3	1	6	
259	45	2½	2⅝	3¾	1	6	
260	30	2½	1⅞	3½	1	0	
261	48	2¾					
262	42	2¾					
263	76	2	3	3	2	6½	
264	19	2	3½	2½	0	7⅝	
265							
266							
267							
268							
269							
270							
271							
272							

BEVEL WHEELS.

$1\frac{1}{8}$ Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
273	58	$2\frac{1}{2}$	2	3	1	9	
274	46	$2\frac{1}{2}$	$1\frac{3}{4}$	3	1	$4\frac{1}{2}$	
275	84	$2\frac{1}{4}$	$3\frac{7}{8}$	$3\frac{1}{2}$	2	$6\frac{1}{4}$	
276	16	$2\frac{1}{4}$	$\frac{1}{4}$	$2\frac{1}{2}$	0	$5\frac{3}{4}$	
277	65	$2\frac{1}{2}$	$3\frac{1}{8}$	$3\frac{1}{2}$	1	11	
278	32	$2\frac{1}{2}$	$1\frac{1}{8}$	3	0	$11\frac{1}{2}$	
279	24	2	9-16	$1\frac{1}{2}$	0	$8\frac{1}{2}$	
280	16	2	$\frac{1}{4}$	2	0	$5\frac{3}{4}$	
281							
282							
283							
284							
285							
286							
287							
288							

BEVEL WHEELS.

Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
289	90	$2\frac{1}{2}$	$3\frac{5}{8}$	$3\frac{1}{4}$	2	$4\frac{3}{8}$	
290	13	$2\frac{1}{2}$	$\frac{1}{4}$	$2\frac{1}{2}$	0	$4\frac{1}{8}$	
291							
292							
293							
294							
295							
296							

$\frac{7}{8}$ In. Pitch.

297	60	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{7}{8}$	1	$4\frac{3}{4}$	
298	21	$2\frac{1}{4}$	$\frac{3}{4}$	$2\frac{1}{4}$	0	6	
299							
300							
301							
302							
303							
304							

BEVEL WHEELS.

¾ Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
305	42	2	1⅜	2⅛	0	10	
306	17	2	¼	2	0	4⅛	
307	37	1¾	1½	2⅛	0	9	
308	15	1¾	3-16	1¾	0	3½	
309	55	2¼	1⅞	2	1	1 3-16	
310	20	2¼	¼	2¼	0	4¾	
311							
312							

⅝ In. Pitch

313	29	1 1-16	¾	1⅛	0	6	
314	17	1 1-16	⅜	1¼	0	3½	
315	21	1 1-16	⅞	1⅜	0	4⅜	
316	16	1 1-16	⅜	1¼	0	3⅜	
317	48	1⅛	⅝		0	9¼	
318	25	1⅛	⅝		0	4⅞	
319							
320							

BEVEL WHEELS.

½ Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
321							
322							
323							
324							
325							
326							
327							
328							

7-16 In. Pitch.

329	56	$\frac{7}{8}$	$1\frac{3}{8}$	$1\frac{5}{8}$	0	$7\frac{3}{4}$	
330	18	$\frac{7}{8}$	$\frac{1}{8}$	$\frac{7}{8}$	0	$2\frac{1}{2}$	
331							
332							
333							
334							
335							
336							

BEVEL WHEELS.

$\frac{3}{8}$ Inch Pitch.

No	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
337	33	$1\frac{3}{4}$	$1\frac{1}{8}$	$2\frac{1}{8}$	0	$7\frac{1}{4}$	
338	17	$1\frac{3}{4}$	3-16	$1\frac{3}{4}$	0	$3\frac{3}{4}$	
339							
340							
341							
342							
343							
344							

$\frac{1}{4}$ In. Pitch.

345						
346						
347						
348						
349						
350						
351						
352						

BEVEL WHEELS.

Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft. In.	Remarks.
353 .... 354	.....	.....	.....	.....	.....	.....
355 .... 356	.....	.....	.....	.....	.....	.....
357 .... 358	.....	.....	.....	.....	.....	.....
359 .... 360	.....	.....	.....	.....	.....	.....

Pitch.

361 .... 362	.....	.....	.....	.....	.....	.....
363 .... 364	.....	.....	.....	.....	.....	.....
365 .... 366	.....	.....	.....	.....	.....	.....
367 .... 368	.....	.....	.....	.....	.....	.....

MITRE WHEELS.

$2\frac{1}{2}$ Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
369	50	12	3	10	3	5	
370							
371							
372							
373							
374							
375							
376							
			2 In. Pitch				
377	38	6	$2\frac{3}{8}$	$5\frac{3}{4}$	2	$0\frac{1}{8}$	
378	75	8	4	$9\frac{1}{4}$	4	0	
379	75	8	$4\frac{1}{2}$	$9\frac{3}{4}$	4	0	
380							
381							
382							
383							
384							

MITRE WHEELS.

1¾ Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
385	35	3¾	3	4⅜	1	7½	
386	54	5	3¾	6¾	2	6	
387	54	5	3¾	6¼	2	6	
388							
389							
390							
391							
392							

1½ In. Pitch.

393							
394							
395							
396							
397							
398							
399							
400							

MITRE WHEELS.

$1\frac{1}{4}$ Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
401	45	$2\frac{1}{4}$	$1\frac{1}{2}$	$3\frac{3}{4}$	1	6	
402	26	$1\frac{5}{8}$	$1\frac{3}{4}$	$2\frac{5}{8}$	0	$10\frac{3}{8}$	
403							
404							
405							
406							
407							
408							

$1\frac{1}{8}$ In. Pitch.

409	51	$2\frac{1}{2}$	$2\frac{1}{4}$	$3\frac{1}{4}$	1	8	
410	66	$2\frac{1}{2}$	2	3	2	0	
411							
412							
413							
414							
415							
416							

MITRE WHEELS.

Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
417	28	$1\frac{5}{8}$	$1\frac{7}{8}$	$2\frac{1}{2}$	0	9	
418	36	2	$1\frac{1}{4}$	$2\frac{1}{8}$	0	$11\frac{1}{2}$	
419	50	$2\frac{1}{4}$	$1\frac{5}{8}$	$2\frac{1}{2}$	1	$3\frac{7}{8}$	
420	50	$1\frac{3}{4}$	$1\frac{5}{8}$	$2\frac{1}{4}$	1	$3\frac{7}{8}$	
421	45	2	$1\frac{1}{2}$	$2\frac{3}{8}$	1	$2\frac{1}{4}$	
422	69	$2\frac{1}{4}$	$1\frac{3}{4}$	$2\frac{3}{4}$	1	10	
423							
424							
425							
426							
427							
428							
429							
430							
431							
432							

MITRE WHEELS.

$\frac{5}{8}$ Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
433	21	$1\frac{1}{8}$			0	$4\frac{1}{4}$	
434							
435							
436							
437							
438							
439							
440							

$\frac{3}{4}$ Pitch.

441							
442							
443							
444							
445							
446							
447							
448							

SPUR CORE WHEELS.

2¼ Inch Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft.	Diameter. In.	Remarks.
449	66	7	3	11¼	
450	160	7	9	6½	
451	78	6¾	4	9	
452	100	7	6	0	
453	80	10	4	9¼	
454					
455					
456					

2 3-16 In. Pitch.

457	88	6	5	1¼	
458					
459					
460					
461					
462					
463					
464					

SPUR CORE WHEELS.

2 Inch Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft.	Diameter. In.	Remarks.
465	60	$6\frac{1}{2}$	3	2	
466	40	$5\frac{1}{4}$	2	$1\frac{3}{4}$	
467	96	6	5	1	
468	46	6	2	$5\frac{3}{8}$	
469	72	6			
470					
471					
472					

$1\frac{3}{4}$ In. Pitch.

473					
474					
475					
476					
477					
478					
479					
480					

SPUR CORE WHEELS.

1½ Inch Pitch.

No.	No of Cogs.	Face.	Diameter. Ft.	Diameter. In.	Remarks.
481	72	4	2	10½	
482	56	4	2	1¾	
483	84	4	3	4	
484					
485					
486					
487					
488					
			1¼ In. Pitch.		
489					
490					
491					
492					
493					
494					
495					
496					

SPUR CORE WHEELS.

Pitch.

No.	No. of Cogs.	Face.	Diameter. Ft. In.	Remarks.
497				
498				
499				
500				
501				
502				
503				
504				
			Pitch.	
505				
506				
507				
508				
509				
510				
511				
512				

BEVEL CORE WHEELS AND PINIONS.

$2\frac{1}{2}$ Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
513							
514							
515							
516							
517							
518							
519							
520							

$2\frac{1}{4}$ In. Pitch.

521	56	6	$5\frac{1}{4}$	8	3	4	
522	51	6	$3\frac{3}{4}$	$7\frac{5}{8}$	3	$0\frac{1}{2}$	
523	120	8	7	8	7	2	
524	140	8	$\frac{3}{4}$	8	2	$4\frac{1}{2}$	
525							
526							
527							
528							

BEVEL CORE WHEELS AND PINIONS.

2 Inch Pitch.

No	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
529	76	6	$4\frac{3}{4}$	$6\frac{3}{4}$	4	$0\frac{1}{4}$	
530	38	6	$1\frac{3}{4}$	7	2	0	
531	44	$5\frac{1}{2}$	5	$6\frac{1}{2}$	2	4	
532	28	$5\frac{1}{2}$	$2\frac{5}{8}$	$6\frac{1}{2}$	1	$6\frac{7}{8}$	
533	80	6	6	$6\frac{1}{2}$	4	2	
534	30	6	$1\frac{1}{2}$	$6\frac{1}{2}$	1	$6\frac{3}{4}$	
535	96	7	6	$6\frac{1}{2}$	5	1	
536	33	7	$\frac{1}{2}$	$7\frac{1}{2}$	1	9	
537	112	6	$7\frac{5}{8}$	$6\frac{1}{2}$	6	$1\frac{1}{2}$	
538	22	6	1	$6\frac{1}{2}$	1	$2\frac{1}{8}$	
539							
540							
541							
542							
543							
544							

BEVEL CORE WHEELS AND PINIONS.

$1\frac{3}{4}$ Inch Pitch.

No.	No. of Cogs.	Face.	Back.	Dept of Eye.	Diameter. Ft.	Diameter. In.	Remarks.
545	80	$4\frac{1}{2}$	4	5	3	$8\frac{1}{2}$	
546	40	$4\frac{1}{2}$	$1\frac{3}{4}$	$5\frac{1}{4}$	1	$10\frac{1}{4}$	
547	44	4	$3\frac{1}{4}$	5	2	1	
548	35	4	$2\frac{1}{2}$	$4\frac{1}{4}$	1	8	
549	56	4			2	$6\frac{3}{4}$	
550	24	4			1	$1\frac{1}{4}$	
551	90	5			4	2	
552	40	5			1	8	
553	54	$5\frac{1}{2}$	$3\frac{1}{2}$	6	2	$6\frac{1}{8}$	
554	42	$5\frac{1}{2}$	$1\frac{7}{8}$	$5\frac{1}{4}$	1	11 5-16	
555	54	5					
556	48	5					
557	54	6					
558	39	6					
559							
560							

BEVEL CORE WHEELS AND PINIONS.

Pitch.

No.	No. of Cogs.	Face.	Back.	Depth of Eye.	Diameter. Ft. In.	Remarks.
561						
562						
563						
564						
565						
566						
567						
568						

Pitch.

569						
570						
571						
572						
573						
574						
575						
576						

PULLEYS.

N.B.—As the Rim Pattern of the following Pulleys is entire, the face can be altered by being made wider or narrower to order. The diameter given are of the pulleys when turned.

Diameter. Inches.	Face. Inches.	Weight.	Diameter. Inches.	Face. Inches.	Weight.
72	13		26	14	
66	20		24	10	
56	20		22	16	
54	20		21	6	
52	24		20	12	
48	23		18	5	
44	6		16	8	
39	18		15	4	
36	11		12	8	
34	16		10	8	
30	14		8	6	
28	5		6	6	

PULLEYS—Continued.

Diameter. Inches.	Face. Inches.	Weight.	Diameter. Inches.	Face. Inches.	Weight.
5	4				
$4\frac{1}{2}$	$4\frac{1}{2}$				
4	4				
$2\frac{3}{4}$	$1\frac{5}{8}$				
$3\frac{1}{2}$	$2\frac{1}{2}$				
$3\frac{1}{4}$	$3\frac{1}{4}$				
$2\frac{1}{4}$	3				

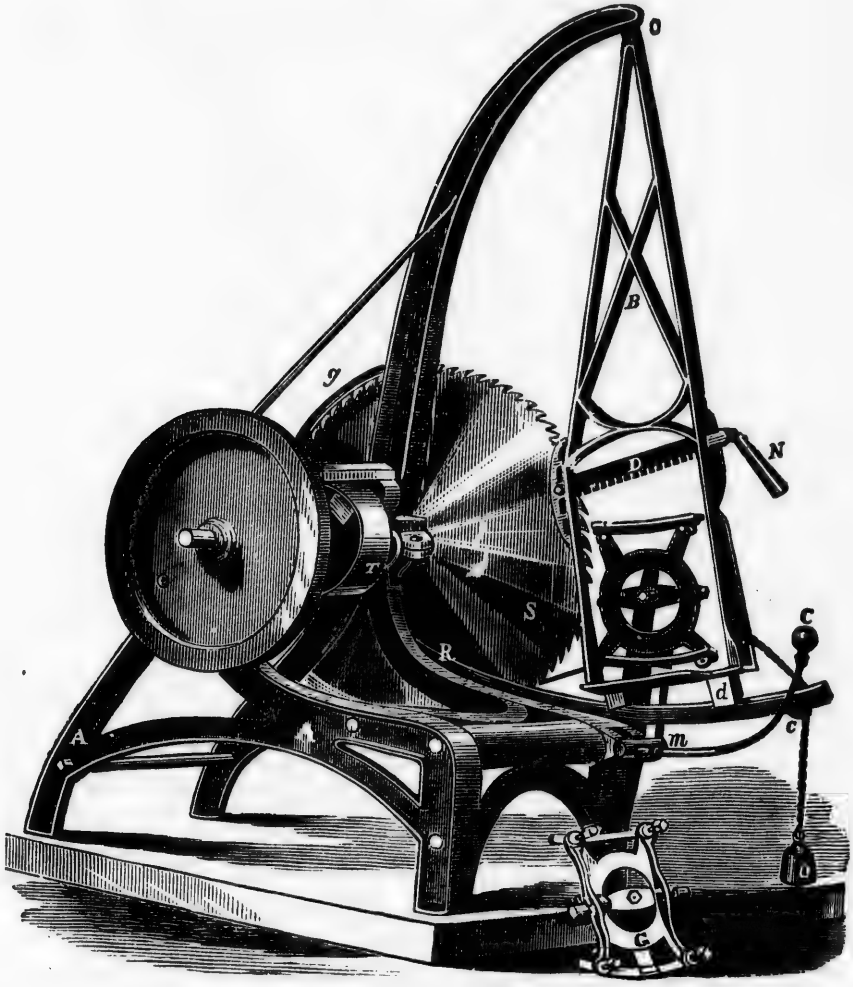
FLY WHEELS.

Diameter. Feet.	Diameter. Inches.	Segments.	Remarks.
2	0		
2	2		
2	6		
3	6		
3	9		
4	6		
5	0		
6	0		
8	0		
8	8		
11	0		
12	0		

N.B.—Can supply Fly Wheels any diameter and weight.

PULLEY FLY WHEELS.

Diameter. Feet.	Diameter. Inches.	Face. Inches.	Segments.	Remarks.
7	0	Any size of face.		N.B.—Pulley Fly Wheels can be supplied of any diameter, size of face or weight, as desired.
8	0			
9	0			
10	0			
11	0			
12	0			
14	0			



Combined Heading and Shingle Machine.

BARREL MACHINERY.

Machine.	Price.
Combined Heading and Shingle Machine..	.....
Heading Planer.....	.....
Heading Turner	.....
Heading and Shingle Jointer, large size. ...	....
Shingle Jointer, small size.....	.....
Stave Cutter, large size	.....
Stave Cutter, small size..... ..	.....
Stave Cutter Connections	.....
Butting Saws, with Iron Frame	.....
Counter Shaft, with Iron Frame.....	.....
Foot Jointer.....	.....
Foot Jointer, with spring.....	.....
Foot Jointer for salt barrel.	.....
Foot Jointer for salt barrel, with spring....	....
Shingle and Stave Block Bolter	.....
Wheel and Screw for Heading Turner.....	.....

Adjustable Hanger.

ADJUSTABLE HANGERS.

Drop. Inches.	Size of Shaft. Inches.	Price.
15	1½	
16	2	
18	2¼	
20	2½	
21	3	
22	3½	

SMOKE STACKS.

No. of Sheet Iron.	Diameter of Stack. Inches.	Price per foot.	No. of Sheet Iron.	Diameter of Stack.	Price per foot.	No. of Sheet Iron.	Diameter of Stack.	Price per foot.
16	18		16	22		14	26	

Smoke Stack Stay Wire,

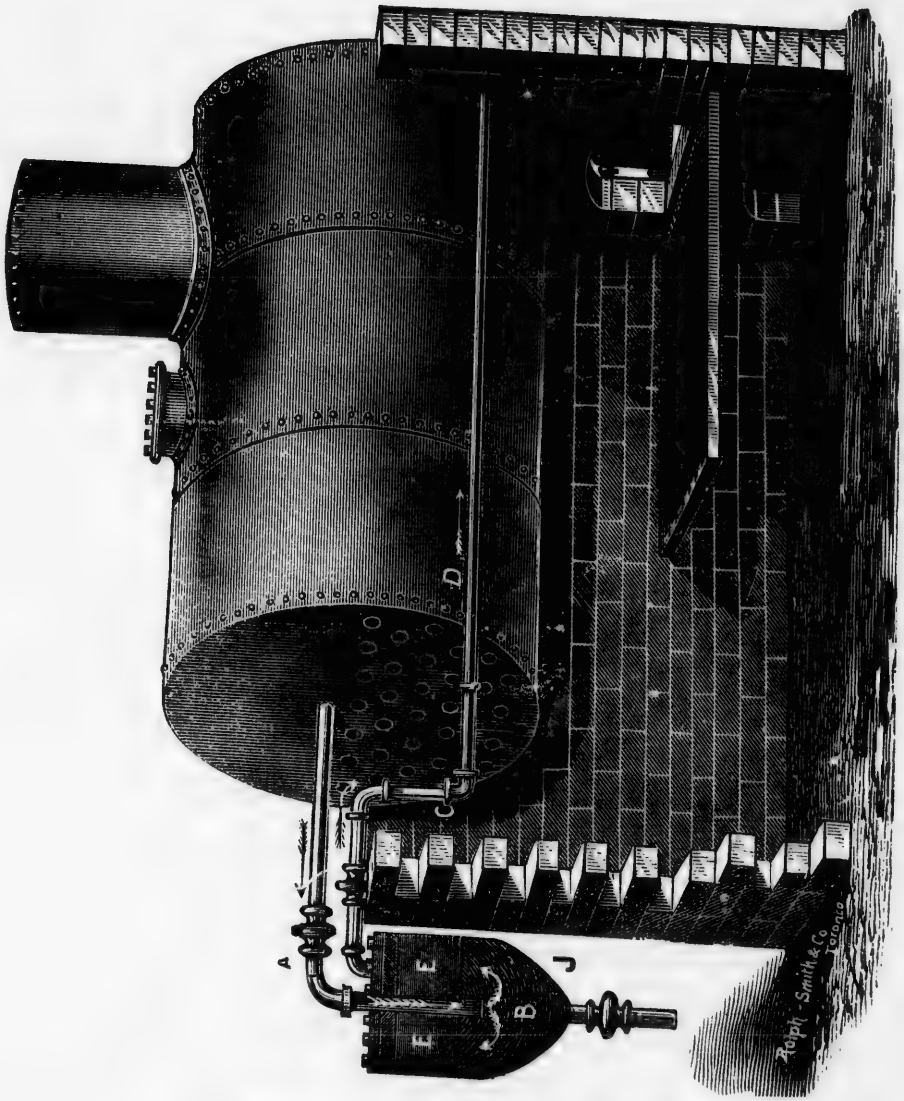
per foot, cents.

COMMON SLIDE VALVE ENGINES.

Diameter of Cylinder.	Length of Stroke.	Horse Power.	Price.	Remarks.
6 In.	12 In.			Engines of any Diameter and Stroke can be supplied.
9 "	12 "	.....	.....	
10 "	16 "	.....	.....	
11 "	18 "	.....	.....	
12 "	18 "	.....	.....	
13 "	22 "	.....	.....	
14 "	22 "	.....	.....	
15 "	24 "	.....	.....	
16 "	24 "	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	

TUBULAR BOILERS.

Diameter of Boiler.	No. of Tubes.	Length and Dia. of Tubes.	Price.	Price of Safety Valve, Front Grates, Soot Door and Frame.	Price of Boiler, complete, with Steam and Water Guages and Guage Cocks.	Remarks.
30	22	10 x 3				Fronts either close or open. Boilers of any size and length, either flue or tubular, supplied on shortest notice.
36	33	12 x 3				
40	38	12 x 3				
44	45	12 x 3				
48	52	12 x 3				
52	58	12 x 3				
54	65	12 x 3				
60	78	12 x 3				



Excelsior Boiler Cleaner Attached.

CARTER'S

NE PLUS ULTRA

ELCELSIOR BOILER CLEANER

Patented in Canada 3rd of October, 1878, No. 9,215.
Patented at Washington, U. S., 22nd October, 1878, No. 209,226.

The cut on page 53 represents Boiler Cleaner attached to a common tube boiler, but is applicable to any boiler.

REFERENCE AND EXPLANATION.

The pipe "A" is the pipe in which sediment and water is drawn through to the bottom of the receiver "B."

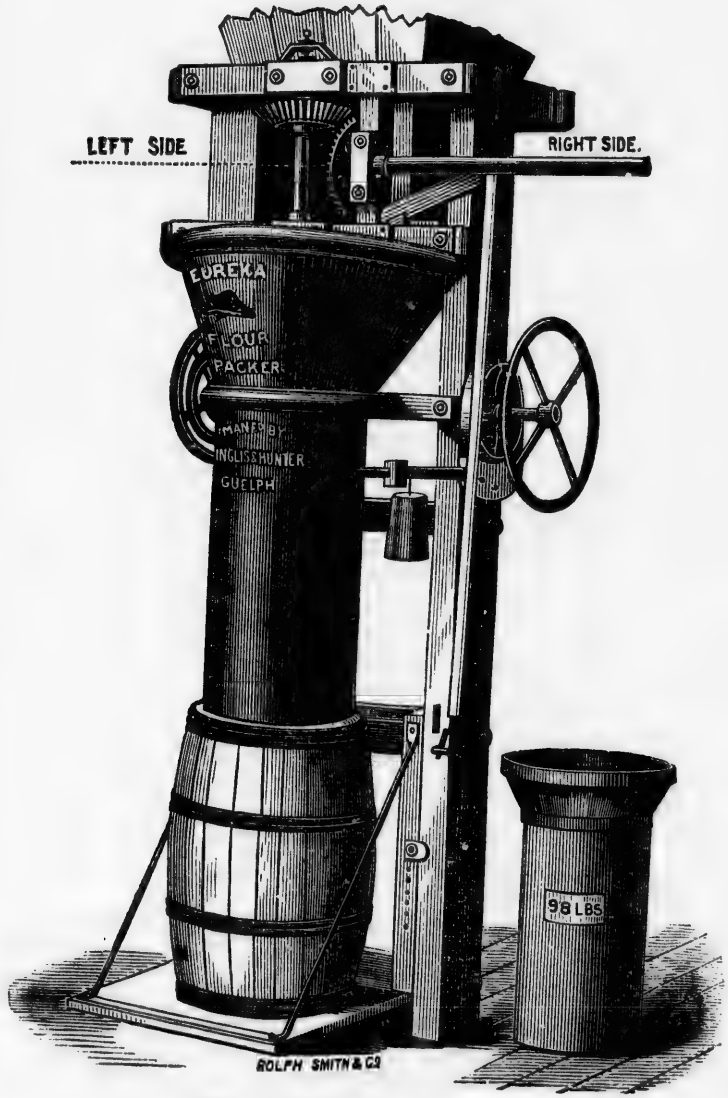
The water being purified in passing up through the filterer "E," "E."

Leaving the sediment and dirt in the bottom of the receiver "B," and the light vegetable matter in the Filter "E," "E."

The clean water being drawn from the Reservoir by the pipe "C" passing along the side of boiler as shown on cut, and inserted into the boiler, as shown in the cut.

DIRECTIONS.

When the boiler is in operation the cocks in the pipes "A" and "C" must be left open to allow the water to circulate, for as soon as the fire is started circulation commences, and is kept up as long as the furnace is hot, thus drawing off the sediment and other impurities all the time, and not allowing it to settle and form into scale, and by thus keeping the water clean in the boiler, it will eventually rot the scale that is already formed, and will drop off in a very short time. The sediment and other impurities to be blown out of the receiver once a day, when the fire is low, close the cocks in the pipes "A" and "C," then open cock "J," when contents are discharged, close cock "J" and open cock "C" to wash out the filterer, then open cock in the pipe "A," leaving the machine in working order, the filter to be changed once a week.



Eureka Flour Packer.

EUREKA PACKER.

Cheap and simple of construction; durable and not likely to get out of order.

Economical in power; not taking half the power of the ordinary screw and auger packers.

Wastes comparatively no flour; the auger working inside of a tight tube of sheet iron, pressing the flour through into the barrel, thereby preventing any flour from flying or scattering about the packing floor.

Can be guaged to pack a uniform amount in every barrel.

Easy to tend; starts with a simple movement of the lever, stops when barrel or sack is packed; driven by a belt or gear, and packs from garner or direct from bolting-chest.

Packs bags, barrels or paper sacks.

DIMENSIONS.

Height, 8 feet, 2 inches; width, 2 feet; speed, 50 to 75 revolutions per minute.

DOUBLE COLUMN PUMP.

COLUMN PUMPS.

Small Size.		Large Size.	
	$		$
Single.....	.....	Single.....	.....
Double.....	.....	Double.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

COMMON SAW MILL PUMP.

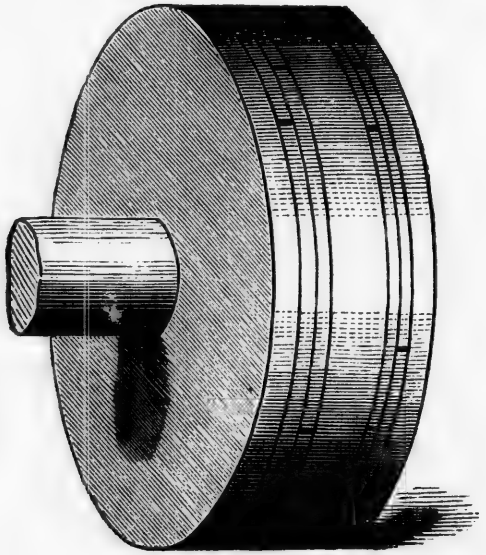
Price.....$

COMMON SAW MILL HEATERS.

(Tubular).

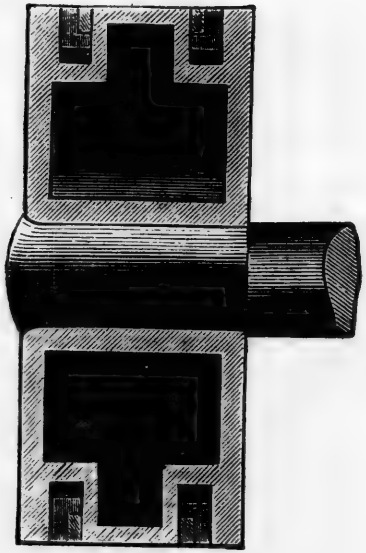
Price.....$ to $

PATENT SELF-PACKING PISTON.



No. 1.

No. 2.



No. 3.

Fig. 1 represents an outside view with the packing in.

Fig. 2 shows parts of packing rings, with spring attached.

Fig. 3 represents a sectional view through centre.

SELF-PACKING PISTON.

The cuts on page 59 represent the packing used in engines of our manufacture. It has been well tested, and has given universal satisfaction wherever applied, and will last for years without any attention or repairs.

The following are a few of its advantages:—

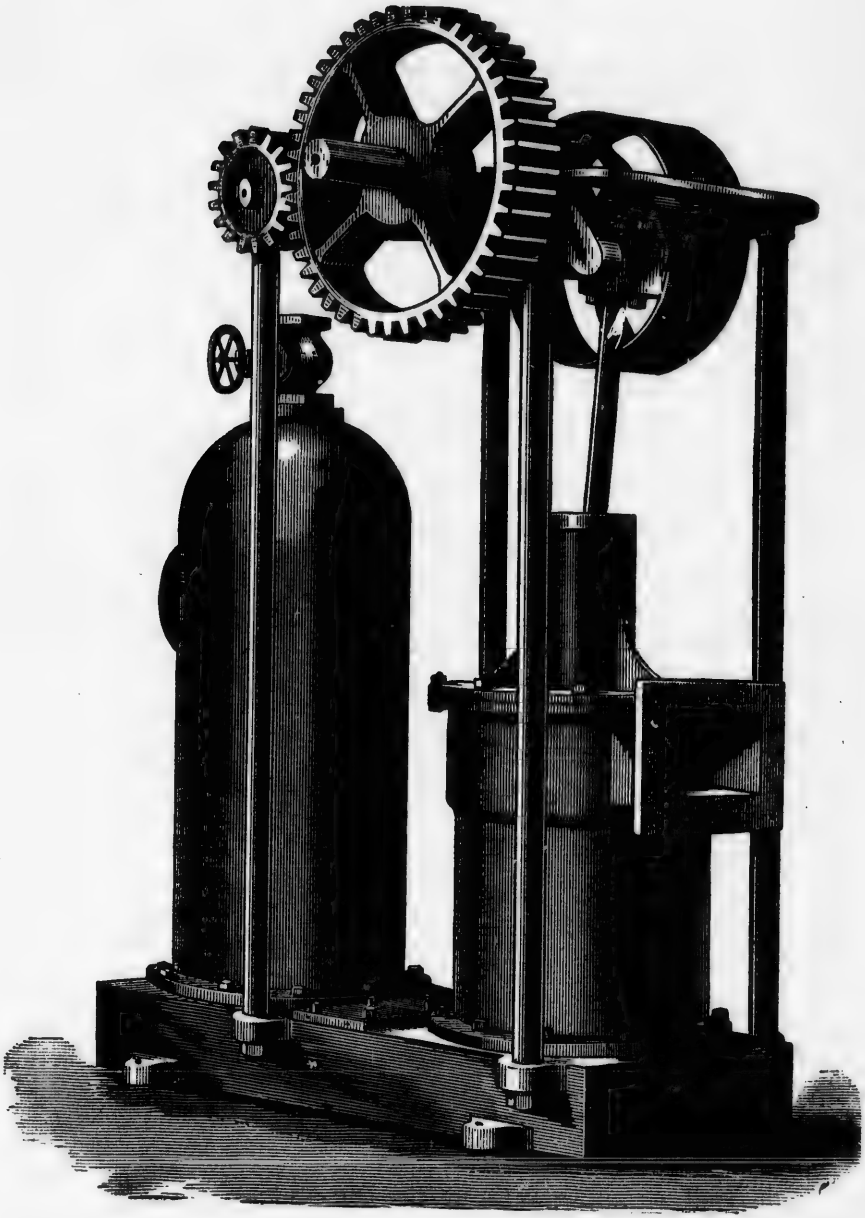
1st. Its operation is with ease and certainty; its perfect tightness and durability, self-action without any attention or setting out of springs, so necessary in other pistons.

2nd. Having no follower bolts or nuts to come loose, simple and light in its construction, with strength, will not get out of order, therefore there is no liability to accidents.

3rd. It is not set out by steam, therefore is not subject to any of the faults of the so-called steam packing, such as cutting the cylinder by great pressure, and wearing it larger at ends with an unnecessary amount of friction.

4th. The piston is made in one piece, cast hollow, with ribs, thereby giving sufficient strength, with one half the weight of other pistons, and reducing the wear on bottom of cylinder. The rings are cut in segments, opposite each other, to break joints.

With an elliptic German silver spring attached to each segment, which, while it does not corrode, retains its elasticity in the temperature of high pressure steam, which is all that is necessary to keep the piston steam tight.



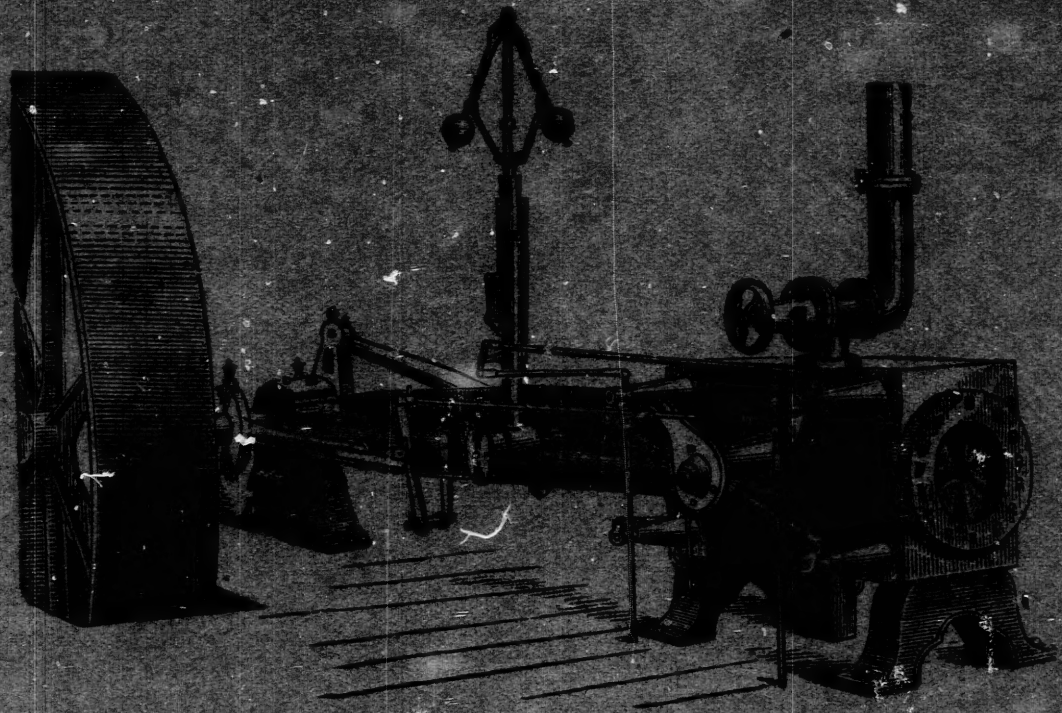
CONDENSER.

AIR PUMP CONDENSER.

The cut on page 61 represents one of our Air Pump Condensers driven by a belt, but they can be arranged to be driven direct from crank or cross-head by a connecting rod, suitable to any position. Are a saving of at least 20 per cent. in fuel and should be attached to all engines where a supply of water is to be obtained. Simple of construction and not liable to get out of order. The valves are of rubber, easily removed, piston packing of brass. Sizes suitable to different sizes of engines.

MISCELLANEOUS PATTERNS, ETC.

Water Wheels.
Water Wheel Gudgeons.
Pillar Blocks.
Water Wheel Flanges.
Mill Spindles.
Damsels.
Stone Bushes.
Munsen's Patent Cast Iron Eyes and Mill Spindles.
All descriptions of Castings for Mully, Gate, and Circular Saw Mills.
Hangers for Shafts.
Cross Cut Sawing Machines.
Flour Packing Machines.
Cast Iron Columns, Window Caps, and Store Fronts.
Wood Lathes.
Saw Gumming Machines.
The Montgomery Smut Machine.
Oswego Stave Cutter.
Curd Mills.
Sheepskin Wringers.
Saw Dust Grate Bars.
Flouring and Grist Mills,
Baker's Dough Breaking Machines.
Sugar Kettles, Potash Kettles, and Coolers.
Screw Wheels.
Portable Boilers and Engines.
Engine Governors.



CORLISS ENGINE.